



# City of Milwaukee Health Department Laboratory

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## SUMMARY OF CONFIRMED INFECTIONS

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October 2011, Vol. 16, No. 10

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The October 2011 issue presents the laboratory diagnosis of some of the infectious diseases and reference microbiology, virology and molecular tests done in the laboratory and new cases of syphilis in the City of Milwaukee during September 2011.

### Syphilis

Test	Total	Test	Total
RPR Reactive	4	TPPA Reactive	14
VDRL Reactive	34	Darkfield Positive	0

### New Cases of Syphilis

Stage	Number of Cases	
	September 2011	September 2010
Primary syphilis	0	0
Secondary syphilis	0	1
Early latent	0	0
Late latent	0	0
Total	0	1

Source: Wisconsin Division of Health

### Gonorrhea Antimicrobial Susceptibility Testing

Number Tested	Decreased Susceptible (DS) / Resistant (R) Antibiotics			
	Ciprofloxacin	Cefixime	Ceftriaxone	Azithromycin
42	2 (R)	0	0	3 (DS)

### Isolates Other Than *N. gonorrhoeae*

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	13	<i>Mycoplasma hominis</i>	Genital	9

### Enteric Parasites Identified

Age	Sex	Parasite
41	F	<i>Blastocystis hominis</i>
7	M	<i>Blastocystis hominis</i>
11	M	<i>Blastocystis hominis</i>
62	M	<i>Blastocystis hominis</i>
16	F	<i>Blastocystis hominis</i>
41	F	<i>Blastocystis hominis</i>
15	M	<i>Blastocystis hominis</i>
		<i>Entamoeba coli</i>
6	M	<i>Blastocystis hominis</i>
		<i>Entamoeba coli</i>
29m	M	<i>Blastocystis hominis</i>
		<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
12	F	<i>Blastocystis hominis</i>
		<i>Entamoeba coli</i>
		<i>Trichuris trichiura</i>
20	M	<i>Blastocystis hominis</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
20	M	<i>Blastocystis hominis</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
23	M	<i>Blastocystis hominis</i>
		<i>Clonorchis sinensis</i>
3	M	<i>Blastocystis hominis</i>
		<i>Trichuris trichiura</i>
31	M	<i>Clonorchis sinensis</i>
61	M	<i>Entamoeba coli</i>
17	F	<i>Entamoeba coli</i>
26	M	<i>Entamoeba coli</i>
12	M	<i>Entamoeba coli</i>
		<i>Iodamoeba buetschlii</i>
30m	M	<i>Giardia lamblia</i>
9	F	<i>Entamoeba histolytica</i>
9	M	<i>Endolimax nana</i>
		<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
14	F	<i>Entamoeba coli</i>
		<i>Trichuris trichiura</i>
22	F	<i>Trichuris trichiura</i>

## Mycobacterial Infections

Age	Sex	Test Results				Identification
		Sputum Smear	Culture	DNA Probe	PCR	
18	F	-	+	+	-	<i>M. avium</i> complex
		-	+	ND	-	<i>M. fortuitum</i>
		-	+	+	-	<i>M. tuberculosis</i>
58	F	-	+	+	-	<i>M. avium</i> complex
54	F	+	+	+	-	<i>M. avium</i> complex
		+	+	+	+	<i>M. tuberculosis</i>
20	F	-	+	+	-	<i>M. tuberculosis</i>

ND = Not done

## Reference Cultures

Age	Sex	Source	Identification
59	M	Stool	<i>Escherichia coli</i> O157:H7
4	F	Vagina	<i>Neisseria gonorrhoeae</i>
21	F	Genital	<i>Neisseria gonorrhoeae</i>
27	M	Urethra	<i>Neisseria gonorrhoeae</i>
27	F	Vagina	<i>Neisseria gonorrhoeae</i>
28	M	Throat	<i>Neisseria meningitidis</i>
75	M	Whole Blood	<i>Salmonella</i> Montevideo
75	M	Urine	<i>Salmonella</i> Montevideo
26	F	Stool	<i>Salmonella</i> Muenchen
61	M	Stool	<i>Salmonella</i> Oranienburg
86	M	Whole Blood	<i>Salmonella</i> Oranienburg
57	M	Stool	<i>Salmonella</i> Paratyphi B var. Java
57	M	Whole Blood	<i>Salmonella</i> Paratyphi B var. Java
40	F	Stool	<i>Salmonella</i> Paratyphi B var. Java
53	M	Stool	<i>Salmonella</i> Typhimurium

## Virus Isolations from Clinical Specimens

Age	Sex	Source	Symptoms	Agent
2	M	Throat and NP	Fever, rash, dehydration	Measles
19	F	Throat	Fever, diarrhea, cough, sore throat, headache	Adenovirus
33	M	Back	Lesion	Varicella-Zoster Virus
19	M	Abdomen	Vesicular rash, R/O shingles	Varicella-Zoster Virus
18	F	Throat	Pharyngitis	Herpes Simplex Type-2

### Herpes Simplex Virus Isolations

Agent	Number of Isolates
Herpes Simplex type 1	16
Herpes Simplex type 2	13

### Molecular Amplification and PCR

Agent	Method	Tested	Positive	% Positive
<i>Bordetella pertussis/parapertussis</i>	RT-PCR	2	0	0%
Influenza virus	RT-PCR	5	0	0%
Measles virus	RT-PCR	10	2	20%
Rubella virus	RT-PCR	10	0	0%
Norovirus	RT-PCR	2	0	0%
Parechovirus	RT-PCR	2	0	0%

### Chlamydia (CT) and Gonorrhea (GC) Molecular Testing

Source	Tested	Positive	% Positive
Urine	577	80 (CT)	13.8%
		45 (GC)	7.8%
Throat swabs	248	5 (CT)	2.0%
		12 (GC)	4.8%
Rectal swabs	48	5 (CT)	10.4%
		3 (GC)	6.3%
Genital swabs	1	0 (CT)	0%
		0 (GC)	0%

### Respiratory Virus Surveillance:

Respiratory Virus Panel Test Results		
Virus	Positives	Percent
Human Rhinovirus (HRV)	2	11.8%
Parainfluenza virus 1 (PIV1)	1	5.9%

Samples tested: 17 (September/October, 2011)

**DNA Sequencing:** The MHD laboratory uses 16S rRNA and the D2 region of the 26S rRNA genes for DNA sequence-based microbial identification of selective reference bacteria and fungal isolates

Reference Microbe	Age	Sex	Source	Target gene	Final Identification
Bacteria	64	M	Bronchial	16S rRNA	<i>Saccharopolyspora</i> species